

**REMARKS**

Upon entry of the amendments in this paper, claims 1-9, 13-14, 18-19, 20-22, and 24 will be pending in the above-identified application, with claims 1-8 being withdrawn. Claims 9, 14, 19 and 24 are herein amended. Claims 10-12, 15-17, and 20-22 are herein canceled. No new matter is entered. It is respectfully submitted that this paper is fully responsive to the Office action mailed on September 13, 2010.

**Claim Rejections – 35 U.S.C. §112**

Claims 9-24 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

Applicants respectfully disagree with the Examiner's position. However, to expedite prosecution and clarify the subject matter of the presently claimed invention, Applicants herein delete "a normal mode of operation" from each independent claim.

Accordingly, Applicants request favorable reconsideration of the above rejection.

**Claim Rejections – 35 U.S.C. §103**

Claims 9-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Applicants' disclosed prior art ("APA").

Applicants disagree with the Examiner's characterization of the APA and previously presented claim language. However, to expedite prosecution and clarify the presently claimed invention, Applicant herein amend claims 9, 14, 19, and 24 and cancel claims 10-12, 15-17, and

20-22. In view of these amendments and the following remarks, Applicants request favorable reconsideration of pending claims 9, 13-14, 18-19, and 23-24.

The Examiner stated in the outstanding Office Action: "The prior art does not teach the setting value to have a power different from a center value of the predetermined intensity variable range (prior art sets the value at P<sub>cent</sub>, fig. 2 S13) alluding to adjustability of the power intensity. In this regard, we agree with the Examiner. Further, the Examiner stated: "It would have been obvious to one of ordinary skill in the art at the time of the invention to adjust the automatic power control (APC) setting value to be a value other than the central power value as a matter of engineering choice, which would allow for values of increased, or decreased, power to be used during varied operating conditions to provide clear output signals."

Applicants respectfully disagree with the Examiner.

First, the Examiner fails to present evidence to show that a person of "ordinary skill in the art at the time of invention" would have been motivated to modify the APA in the above-manner.

For example, the specification describes: "The controlling ability required in a wavelength locker module has been one point of power (or power intensity) with respect to a single-wavelength laser diode (hereinafter referred to simply as "LD"). Also, a fixed standard margin (power margin) has been set on the power recently, since multi-wave tuning became necessary." *See* page 1, lines 29-35. In other words, it is required that only the center value of the predetermined intensity variable range is defined for one wavelength.

Further, the specification describes: "However, even if the controlling point is not located within the temperature variable range, the function  $\lambda\_CONST$  for maintaining the target wavelength  $\lambda\_targ$  may cross the region in which the power variable range and the temperature variable range overlap each other. In this case, the LD module is still considered to be defective, resulting in a low LD module yield." *See* page 7, lines 18-24. That is, those skilled in the art did not have any idea of using an arbitrary value other than the center value of the predetermined intensity variable range.

Second, Applicants disagree with the Examiner's assertion that it would be obvious to one of ordinary skill in the art at the time of the invention to adjust the APC setting value as a matter of engineering design choice because it would "provide clear output signals." What is meant by "clear output signals?" Plus, how is it determined whether output signals are clear or not? What is the relation between "increased or decreased power" and "clear output signals." Applicants submit that the Examiner fails to present evidence that shows motivation to adjust the automatic power control (APC) setting value to be a value other than the central power value in the applicant's admitted prior art.

As pointed out above, Applicants herein amend claims 9, 14, 19 and 24 to more clearly define the invention. These amended claims relate to the laser module being able to vary wavelengths and specifies units, steps and instructions in detail. For example, the APA does not describe or suggest "shortest wavelength relational expression defining unit" and "longest wavelength relational expression defining unit". Fig. 2 of the present application fails to disclose or suggest these units. Also, the combination of Fig. 2 with Figs. 3A and 3B does not result in

the above units. Similarly, the above combination does not result in "power intensity upper limit value calculating/defining unit" and "power intensity lower limit value calculating/defining unit".

Lastly, it appears that the Examiner is improperly relying on knowledge obtained from Figs. 4A and 4B in order to characterize and interpret Figs. 3A and 3B. As previously explained, a person of ordinary skill in the art merely understands from Fig. 3B that the device having the characteristic shown in Fig. 3B is defective.

In view of the aforementioned amendments and remarks, Applicants submit that pending claims 9, 13-14, 18-19, and 23-24 are not obvious in view of the APA.

### **Conclusion**

Applicants submit that the pending claims are in condition for allowance. If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview.

Application No. 10/614,277  
Art Unit: 2828

Amendment under 37 C.F.R. §1.116  
Attorney Docket No. 030824

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,  
**WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP**

/DARRIN A. AUITO/

Darrin A. Auito  
Attorney for Applicants  
Registration No. 56,024  
Telephone: (202) 822-1100  
Facsimile: (202) 822-1111

DAA/rse